

# Retropharyngeal haematoma after blunt trauma

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An 88 year old woman fell onto her Zimmer frame striking her chin. Six hours later she developed difficulty in breathing with a hoarse voice and neck swelling, at which time she presented to the accident and emergency department. On arrival she had stridor, a hoarse voice and a large diffuse neck swelling mainly on the left side. She underwent an urgent radiograph of the neck and computed tomography. The lateral radiograph of the neck revealed a large retropharyngeal soft tissue swelling (fig 1). Computed tomography revealed a large soft tissue swelling posterior to the trachea. The appearances were consistent with an extensive retropharyngeal/tracheal haematoma tracking into the posterior mediastinum and base of skull (fig 2). The patient was admitted for observation. Over the next 24 hours, her respiratory problems resolved.

Retropharyngeal haematoma not associated with a cervical fracture is a rare occurrence.<sup>1</sup> The retropharyngeal space is bounded anteriorly by the buccopharyngeal fascia and posteriorly by the prevertebral fascia and it extends from the base of the skull to the level of the 1st thoracic vertebra. Aetiologies include blunt trauma as in the case presented,<sup>2</sup> oesophagoscopy, endotracheal and nasogastric tube intubation, hyper-extension of the neck, fish bone ingestion, whiplash injury, and complication of warfarin treatment. Our patient was receiving long term aspirin treatment (75 mg). Patients may present with varied symptoms, which include airway obstruction, neck swelling, stridor, hoarse voice, dysphagia, neck pain and neck stiffness. Valuable investigations include a

lateral radiograph of the neck, which demonstrates the retropharyngeal soft tissue swelling. A prevertebral soft tissue thickness of greater than 7 mm in the cervical vertebrae C1–C4 and/or 22 mm in the cervical vertebrae C5–C7 suggests significant pathology.<sup>3</sup> The absence of any active bleeding cannot be excluded by computed tomography alone although none was demonstrated in this case. If there was deterioration in the patient's condition further imaging such as angiography may locate a source of bleeding.

The rapid resolution of respiratory symptoms and stable vital signs indicate a good prognosis as in this case. Retropharyngeal haematoma is a potentially life threatening event with the danger of acute airway obstruction. Investigation to confirm the diagnosis should be carried out promptly with an anaesthetist present in case intubation or surgical airway is needed. Surprisingly, despite the presence of stridor and radiological prevertebral soft tissue swelling of 50 mm our patient did not need any airway intervention.

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Figure 1 Lateral radiograph of the neck showing soft tissue swelling.

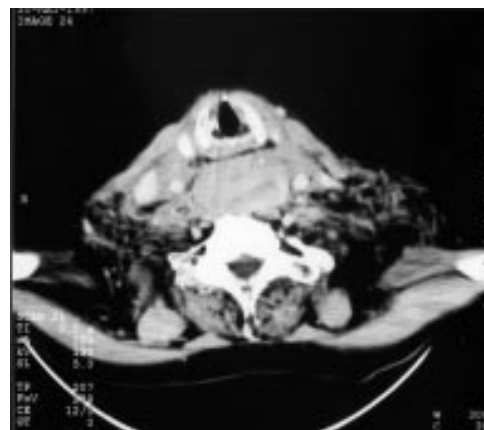


Figure 2 Computed tomography showing extent of haematoma.